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FIRST RECORD OF A COPEPOD PARASITIZING THE OSTRACOD FAMILY RUTIDERMATIDAE (MYODOCOPINA: CYPRIDINACEA): *SPHAERONELLA SPINOSA* N. SP. (COPEPODA: CHONIOSTOMATIDAE)

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Abstract.—*Sphaeronella spinosa,* a new species of Choniostomatidae (Copepoda) from the continental shelf off South Carolina and Georgia, U.S.A., is described and illustrated. This is the first record of a copepod parasitizing the ostracod family Rutidermatidae (Myodocopina: Cypridinacea).

I am grateful to Dr. Louis S. Kornicker, Smithsonian Institution, who brought to my attention two female choniostomatid copepods and one copepodite, parasitic on a new species of the ostracod *Rutiderma* from the continental shelf off South Carolina and Florida, U.S.A. These are the first copepods recorded parasitizing the myodocopid ostracod family Rutidermatidae (superfamily Cyridinacea). Copepods have previously been recorded parasitizing the other families in the Cypridinacea (see Bradford, 1975). The copepods proved to be undescribed but closely related to *Sphaeronella monothrix* (Bowman and Kornicker, 1967), *S. anarthronis* Bradford, 1975, *S. philomedesi* Bradford, 1975. The specimens were mounted in glycerine and observed whole between two cover glasses fixed in a metal holder. The ostracod is being described by Kornicker as *Rutiderma darbyi* Kornicker (in litt.) (deliberate nomen nudum herein).

Sphaeronella spinosa, new species
Fig. 1

Holotype.—Female, length 0.306 mm, width 0.276 mm, from host USNM 158003 deposited in the National Museum of Natural History, Smithsonian Institution (USNM 158277).

Paratypes.—Female (USNM 158278), length 0.300 mm, width 0.259 mm from host USNM 158109. Copepodite (USNM 158279), length 0.144 mm from host USNM 158003.

Type-locality.—Off the coast of Florida, U.S.A. at 31°05′N, 80°35′W at 26 m depth.

Etymology.—This species is named for the relatively greater amount of head ornamentation compared with its close relatives.

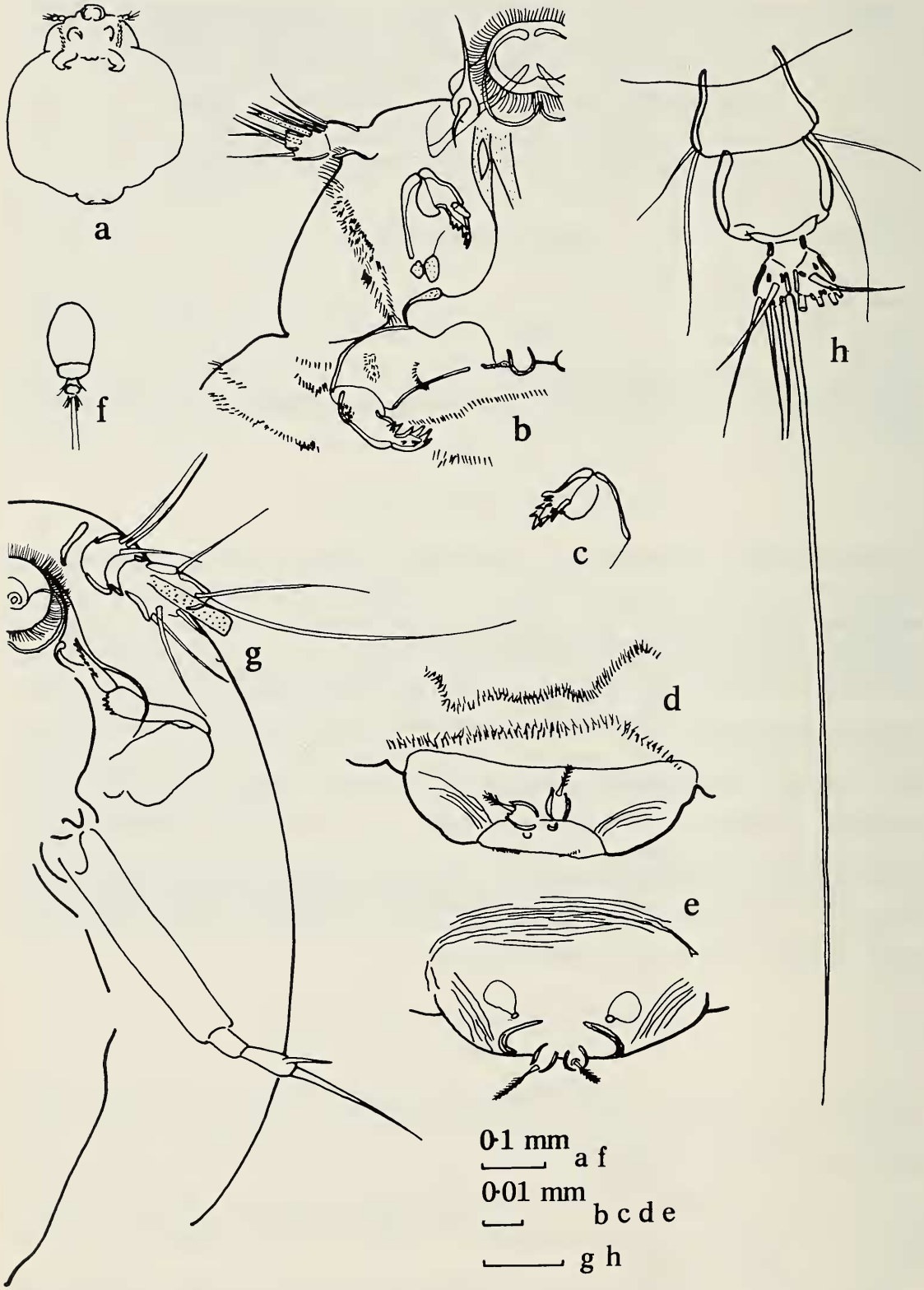

Fig. 1. *Sphaeronella spinosa*. Female: **a,** Ventral view; **b,** Head, ventral view; **c,** Detail of maxilla 2; **d,** Genital area, dorsal view (holotype); **e,** Genital area, ventral view (paratype). Copepodite: **f,** Dorsal view; **g,** Cephalothorax, ventral view; **h,** Urosome, dorsal view..

Material examined.—One female (holotype), 1 copepodite from host USNM 158003, Stn 0225-3 (5D) 25 Feb. 1977, 31°05′N, 80°35′W, 26 m. One female (paratype) from host USNM 159109, Stn 0177-3 (3E), 32°01′N, 79°31′W, 43 m, off South Carolina, 18 Feb. 1977. The material was collected by Dr. W. E. Pequegnat.

Description.—Female: length 0.306 mm, width 0.276 mm. Body globular in dorsal view. Head on anterior border, frontal margin bordered by row small spinules on dorsal surface. Antenna 1 2-jointed, aesthete slightly longer than joint 2. Antenna 2 absent. Maxilla 1 2-branched. Maxilla 2 terminal joint with 2 rows of teeth along inner border and a not well sclerotized lobe. Maxilliped 3-jointed; basal joint with row of inner edge spinules and patch of more distal spinules on ventral surface, joint 2 with several spines on inner distal corner and patch of proximal spinules on outer border, joint 3 inner border with 2 rows of teeth. Submedian skeleton not well sclerotized, ridges posterior to maxilla 1, at base of maxilla 2 and in form of pair of semicircular processes located between maxillipeds. Lateral margins of head ornamented with broad band of spinules which terminate anteriorly on dorsal surface anterior to antenna 1. Trunk ornamented on dorsal and anteroventral surface with semicircular rows of spinules. Legs not evident. Genital area posteriorly placed on trunk, raised, without ornamentation, borders of plate not obvious, openings of seminal receptacles anterior to genital apertures on ventral surface. Caudal rami just on dorsal surface of holotype, terminal on paratype, consisting of simple cylindrical joint with one terminal plumose seta.

Male: Unknown.

Copepodite: Length 0.144 mm. Cephalothorax length 1.3 times width. Antenna 1 3-jointed, aesthete scarcely longer than joint 3 but may be damaged. Antenna 2 apparently absent. Maxilla 1 3-branched. Maxilla 2 distal part of joint 2 and terminal claw with toothed inner borders. Maxilliped 4-jointed. Legs 1 and 2 apparently similar to those of *S. anarthronis* although this could not be completely confirmed because of position in which limbs are mounted. Abdomen with 2 setae on posterior angle of segment 1, longest extends beyond caudal rami. Caudal rami and abdominal segment 3 separate. Caudal rami each with 5 setae, inner seta longest almost as long as cephalothorax, 1 seta on dorsal surface.

Variation.—The paratype female has less trunk ornamentation on the posterodorsal surface than the holotype female. Also on the paratype female the inner edge row of spinules on maxilliped joint 1 is not evident.

Remarks.—*Sphaeronella spinosa* was found posterodorsally in the carapace of the host, a female *Rutiderma darbyi* (Fig. 2). *Sphaeronella spinosa* most closely resembles *S. monothrix, S. anarthronis* and *S. philomedesi* which also have antenna 1 2-jointed, antenna 2 absent, maxilla 1 2-branched and the maxilliped 3-jointed. *Sphaeronella spinosa* differs from *S. monoth-*

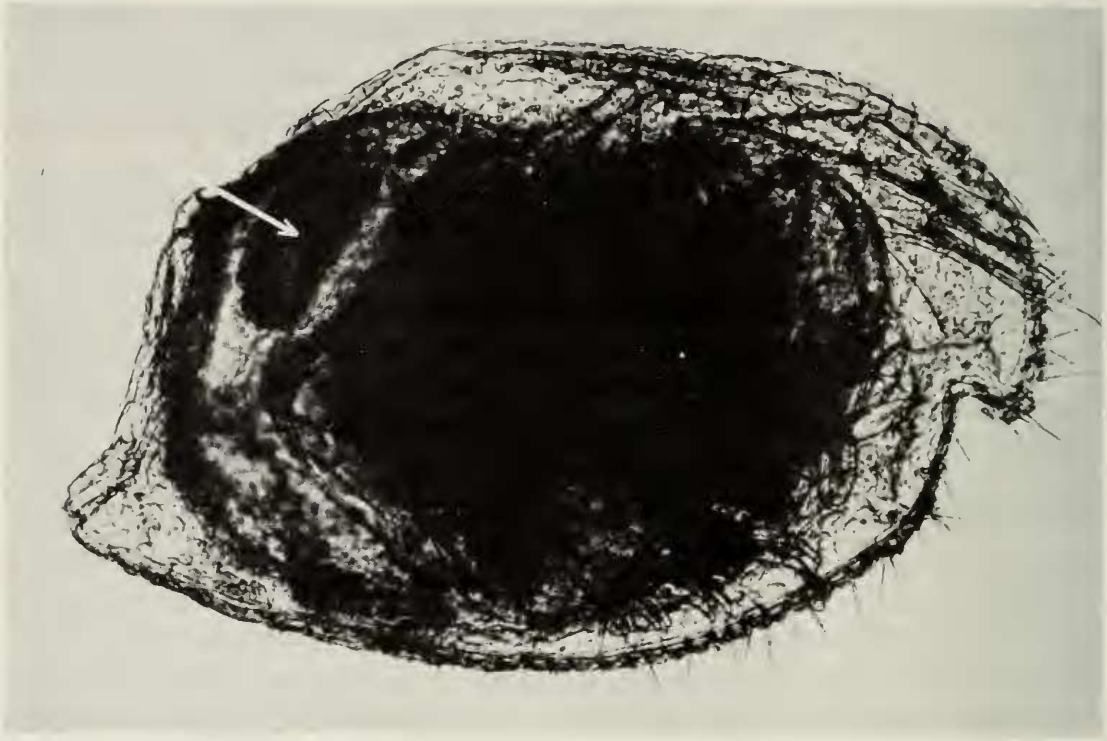

Fig. 2. Photomicrograph of host ostracod, a female *Rutiderma* USNM 158003, length 1.3 mm, indicating position of parasitic choniostomatid female *Sphaeronella spinosa*, holotype USNM 158277.

rix because the latter has no ornamentation on its maxilliped, and is without spinules on the lateral borders of the head; from *S. anarthronis* which has the maxilliped differently ornamented and is without surface patches of spinules on the ventral surface of joint 1 and outer proximal surface of joint 2; from *S. philomedesi* which has very little ornamentation on its maxilliped and is without the large projection on the distal portion of joint 2. The copepodite of *S. spinosa* appears to differ from that of *S. anarthronis* in having no antenna 2.

Literature Cited

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